Veterans Computer Tutorial Program

SYLLABUS

COMPUTER PROGRAM OUTLINE

OBJECTIVE and PURPOSE:

A. Veteran will be able to access the Internet for the purpose of:
    1. Being familiar with an IBM format computer hardware.
    2. Downloading Veterans Administration Forms.
    3. Knowing how to obtain information.

B. Evaluate veterans familiarity and knowledge of computers.
    1. Does not own.
    2. Owns but cannot get on internet.
    3. Owns but is uncertain of operation.

INTRODUCTION:

The Internet has been evolving for some 30 years largely under the influence of some extremely nerdy people; it was not designed to be particularly easy for "normal" people to use.

    Q. What is the Internet, also known as the net?
    A. The world's largest network.

    Q. What is a network?
    A. A bunch of computers hooked together and allowed to communicate. (Sort of like a bunch of TV stations sharing a soap opera. The difference is that the TV stations all get the same episode. While the Internet allows computer A to communicate with one or several computers anywhere in the network.)

The Internet is a network of networks all freely exchanging information. From corporate networks (Like AT&T, GM, HP), to colleges and universities, and many others, including the one in your back bedroom.

SYLLABUS

(*Note:* Since this is intended as one on one instruction demonstration and veteran operation and practice is at the discretion of the instructor.)

SECTION 1: *FUNDAMENTALS*

A. The two basic parts of a computer system:

1. a) **Hardware** - is any part of a computer you can touch. Such as:
    Central Process Unit
    Monitor
    Keyboard
    Mouse

    b) **Peripheral Hardware** - is any piece attached to a computer. Such as:
    Printer
    Scanner
    Fax machine

2. **Software** - is a set of electronic instructions that tell a computer what to do, you cannot see or touch software. You can see the packaging it comes in.

    a) **Application Software** - Microsoft Word, Adobe Photoshop allow you to accomplish specific tasks.

    b) **Operating Software** - Windows 98, XP control the overall activity of the computer.

B. How a computer works - A computer collects, processes stores and outputs information.

    1. **Input** - any device that allow you to communicate with a computer. You use input devices to enter information and issue commands. Typical input devices are keyboard, mouse and discs.

    2. **Store** - to place information on storage media, so that the computer can use this information to perform tasks.

    3. **Process** - the Central Processing Unit (a.k.a. CPU) is the main chip that process instructions, performs calculations and manages the flow of information through the computer system.

    4. **Output** - lets a computer communicate with you. These devices Display information on a screen, print copies and generate sound.

C. Make up of typical computer system:

    1. **Computer Case** (CPU) holds all of the major components.
    2. **Monitor** displays text and images generated by the computer.
    3. **Printer** produces hard copies as seen on the monitor.
    4. **Keyboard** allows the input of information and instructions by typing.
    5. **Mouse** allows you to select items on the monitor screen.

SECTION 2: *BASIC SKILLS*
(*Note:* Upon completion of this section veteran is expected to be able to do the items listed. Instructor will demonstrate and veteran will practice.)

A. Turn computer on and off

B. Operate Mouse - Four common actions with mouse.
    1. Pointing
    2. Clicking - single, double, right and left

3. Drag and Drop
4. Play Solitaire - as a means of practice in mouse manipulation

C. Keyboard - explain its use for entering information and instructions. Discuss and show various keys and their uses. Suggest veteran learn keyboard and how to type (Mavis Bacon program).

D. Understand desktop and icons

SECTION 3: *OPERATING ABILITIES*
(*Note:* Let veteran try several of the operations and practice.)

A. Access word processing software
B. Create a document, file, and name them
C. Create and name folders
D. Change names
E. Delete files and folders. Concept of recycle bin
F. Save files and backup concept

SECTION 4: *STORAGE DEVICES*

A. **Hard Drive** - the primary device the computer uses to store information. Explain and show the following:

1. Program Files
2. Data Files (documents, spreadsheets, database, graphics)
3. Save Files - important function of hard drive.
4. Organize Files - similarity to filing cabinet. Use of folders.

B. **CD-ROM Drive** - a device that stores information on compact discs and is used to input information to the computer. (Same as music discs.)

1. Used to install programs (Windows XP, Adobe Photoshop etc.)

2. Used to play music CD's

3. CD-RW can be used to store large amounts of information. Allows you to change data many times. One disc can store more than 600MB of data. This is equal to an entire set of encyclopedias or over 400 floppy discs.

4. Handling discs - show how to handle, insert, remove and protect.

SECTION 5: *SOFTWARE*

A. **Application Software** - is used when you want to accomplish specific tasks such as write letters, work with graphics, track finances, play games, etc.

   1. **Form** - application software usually comes on CD ROM disc or on several floppy discs.

   2. **To use** in order to access the information it must be installed to your computer via the CD Drive. An icon will appear on the desktop.

   3. **Word Processor** (application software) - can create documents, edit text, rearrange paragraphs, format the appearance of documents, send information to a printer to make a printed copy, add graphics, tables, and do many other tasks.

B. **Operating Software** - usually installed in computer at time of purchase and referred to as Operating System (OS). An operating system ensures that all components of a computer system work in synchronization based on information and instructions.

   1. Functions of OS:

   a) Control Hardware - CPU, monitor, printer, etc.

   b) Runs application software - Word, Adobe Photoshop, etc.

c) Information - provide ways to manage and organize stored information. OS can be used to sort, copy, move, delete and view files.

d) Platforms - type of OS computer uses. Many can not be used interchangeably (example of platforms; MS-DOS; Windows; Unix; Mac).

SECTION 6: *NETWORKS*
Overview: A group of computer systems connected together that allows people in the network to share information and equipment.

1. **Local Area Network (LAN)** - a network that connects computers within a small geographic area.

2. **Wide Area Network (WAN)** – a large group of computer systems connected together that allows the transmittal of information by telephone lines, microwaves, satellite, over a large area like a city or country.

SECTION 7: *INTERNET*
The internet is the largest computer network, consisting of thousands of connected networks around the world. In the late 1960's the US Department of Defense began the internet. The network quickly grew to include scientists and researchers across the country and eventually schools, businesses, libraries and individuals around the world. Each government, company and organization on the net is responsible for maintaining its own network. Most of the information on the internet is free.

A. **Internet Offers**

1. Electronic Mail (e-mail) - Is the most popular feature on the internet. It allows the free exchange of information with people, businesses, schools, libraries etc. It is fast easy and saves paper and postage.

2. Information - Give access to information on any subject. You can review newspapers, magazines, academic papers, government documents, recipes, airline schedules, weather reports, etc.

3. Programs - Thousands of programs are available. Programs such as word processors, spreadsheets, database and games.

4. Entertainment - Hundreds of games are available free of charge including chess, poker, solitaire, football. You can review current movies, listen to music, review TV shows and much more.

5. Discussion Groups - You can join discussion groups around the world and exchange information with people about subjects that are of interest. You can ask questions, solve problems and read stories.

6. Online Shopping - You can order goods and services. You can buy all types of items such as books, flowers, music CDs, cameras, computer equipment and programs, securities, new and used cars, etc.

B. **How it works** - All computers on the internet work together to transfer information around the world.

1. The Backbone - of the internet is the high speed data lines that connect major networks around the world.

2. The Language - computers use to communicate with each other is Transmission Control Protocol/Internet Protocol (TCP/IP). TCP/IP divides information you send into small packets and sends the packets over the high speed data lines. When the information arrives at its destination TCP/IP ensures that all the packets are correctly reassembled.

3. Routers - a specialized computer that regulates traffic on the internet. It picks the most efficient path for each packet to travel. A packet may pass through many routers before reaching its destination.

4. Download/Upload - when you receive information from another computer on the net, you are downloading. Conversely when you send information you are uploading.

C. **Connecting** - You need specific equipment and programs to connect to the internet. The following are required:

   1. Computer - any type PC, IBM or Macintosh compatible.

   2. Modem - lets computers connect to as well as exchange information through telephone lines.

   3. Internet Service Provider (ISP) - a company that gives you access to the internet, usually for a fee. (Such as AOL, Bestweb, Earthlink, AT&T.)

   4. Program - special program to use the internet. Most ISPs that connect you will provide the program free.

(*Note:* Demonstrate and then let veteran do and practice connecting to the internet. Just get to start page.)

SECTION 8: *WORLD WIDE WEB (www)*
The web is part of the internet. The web consists of a huge collection of documents stored on computers around the world.

A. **Web Page** - is a document on the web. Web pages can have on them text, graphics, sound and video or any combination of these.

B. **Web Site** - is a collection of web pages maintained by a college, university, government agency, company, organization or individual.

C. **Uniform Resource Locator (URL)** - each web page has a unique place were it exists. This is just like a home address. It is referred to as an address. A web page can be instantly displayed if you know its address.

All web page URLs start with http:// (Hyper Text Transfer Protocol)

D. **Web Browsers** - is a program that permits you to explore and view information on the web.

> 1. **Home Page** - is the page that appears each time you start your web browser. You can choose any page. Choose a home page that provides a good start for exploring the web.
>
> 2. Features – you should be able to:
>
>> a) Browse through information efficiently and securely.
>>
>> b) Exchange e-mail messages with people around the world.
>>
>> c) Communicate with other people through a chat room.
>>
>> d) Create and edit your own web page.
>>
>> e) Have channels which cover topics like cooking, movies, news, stocks, travel and many other specifics.
>>
>> f) List of web pages visited and marked as favorites bookmarked.

(*Note:* Try and get copies of browser pages showing menu bars, tool bars, drop down menus and add explanations as hand out.)

E. **Search Engines** - a special tool that helps in finding information on the web. Most search engines consist of directories or indexes of web pages/web sites. There are many search engines, but two of the most popular are GOOGLE and YAHOO. Most web browsers will show a search dialogue box. By entering a few key words of what you are looking for will usually start the information trail. The opening of web pages or sites will invariably lead you to more related information. EXPLORE! EXPLORE! EXPLORE!
(*Note:* Show veteran several topics of his choice. Let him/her try and practice.)

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